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10/572,965

03/21/2006

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EXAMINER

HUYNH, KHOA B

ART UNIT

PAPER NUMBER

4145

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/572,965 | Applicant(s) SAFFRE, FABRICE T. P. | |
| | Examiner KHOA B. HUYNH | Art Unit 4145 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on March 21st, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/21/06, 05/02/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if

the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

- a. A person shall be entitled to a patent unless –
- b. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-5** are rejected under 35 U.S.C. 102(b) as being anticipated by **Amalfitano, US 2001/0033557**.

5. **As per claim 1,**

6. Amalfitano teaches:

7. A method of controlling access to a communications resource (***Amalfitano, page 1, paragraph 8, lines 7-8***, "a scheme for assigning priority levels to users based upon a history of their request for access to the resources") in which the maximum capacity made available to each of a plurality of users bears an inverse relationship to the usage of the resource made by that user over a previous period, relative to the usage made by the other users (***Amalfitano, page 1, paragraph 8, lines 8-15***, "If a user has, over a historical period of time, made fewer demands than a stated amount, that user is given a higher priority than a user who has made greater use of the resources than their stated amount. Thus, users making the heaviest demand on the available resources are

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allocated fewer resources despite their demand, whereas users that make less demands for the resources are granted more of the resources they request")

8. **As per claim 2,**

9. Amalfitano teaches: a method according to claim 1 (see claim 1 rejection)

10. Amalfitano further teaches: comprising the steps of: measuring the usage of the resource made by each user over a predetermined period (***Amalfitano, fig 2;***

Amalfitano, page 3, paragraph 36, lines 1-2, "FIG. 2 is a graph illustrating resource usage by a particular user over a course of a month")

11. ranking the users according to the measured usage (***Amalfitano, fig 4A, element 425, determine priority level of all inactive users based on historical useage for month)***

12. restricting the availability of resource to each user by applying a restriction factor to each user according to that user's ranking. (***Amalfitano, paragraph 55, 57: x and y are restriction factors)***

13. **As per claim 3,**

14. Amalfitano teaches: a method according to claim 2 (see claim 2 rejection)

15. Amalfitano further teaches: in which the restriction factors allocated to adjacently ranked users differ by a ratio (***Amalfitano, page 2, paragraph 46, lines 1-4: the ratio is 1/4)*** which is constant over all users (***Amalfitano, page 3, paragraph 42, lines 1-4,***

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“the priority ratio assigned to users at different priority levels is respected independently of the total number of users assigned to each given priority level”)

16. **As per claim 4,**

17. Amalfitano teaches: a method according to claim 2 (see claim 2 rejection)

18. Amalfitano further teaches: in which the restriction factor allocated to the user having made the least usage over the previous period is unity (***Amalfitano, page 4, paragraph 56***, for two priority levels, restriction factor allocated to user having made the least usage is $x=1.08$, as the number of priority levels increases, x will go to 1, unity)

19. **As per claim 5,**

20. Amalfitano teaches: apparatus for controlling access to a communications resource having means for allocating capacity to each of a plurality of users

(***Amalfitano, fig 1, element 145***, WIF: wireless interface facility; ***Amalfitano, page 2, paragraph 32, lines 6-7***, “Management and allocation of wireless channels 130 is provided by WIF 145 and corresponding resources 150”) in inverse relationship to the usage of the resource made by that user over a previous period, relative to the usage made by the other users (***Amalfitano, page 1, paragraph 8, lines 8-15***, “If a user has, over a historical period of time, made fewer demands than a stated amount, that user is given a higher priority than a user who has made greater use of the resources than their stated amount. Thus, users making the heaviest demand on the available resources are

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allocated fewer resources despite their demand, whereas users that make less demands for the resources are granted more of the resources they request”)

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Amalfitano, US 2001/0033557** in view of **Otis US 6,085,241**.

23. **As per claim 6,**

24. Amalfitano teaches: apparatus according to claim 5 (see claim 5 rejection)

25. Amalfitano further teaches: ... measuring the usage of the resource made by each user over a predetermined period (***Amalfitano, fig 2; Amalfitano, page 3, paragraph 36, lines 1-2, “FIG. 2 is a graph illustrating resource usage by a particular user over a course of a month”***)

26. sorting means for ranking the users according to the measured usage calculation (***Amalfitano, fig 1, element 160: queue. Amalfitano, page 3, paragraph 41, lines 2-3, “queue 160 maintains lists of access requests organized by priority level; Amalfitano,***

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fig 4A, element 425, *determine priority level of all inactive users based on historical useage for month)*

27. ... calculating a restriction factor for each user according to that user's ranking (**Amalfitano, paragraph 55, 57**: *x and y are restriction factors*)

28. ... making the resource available to each user to an extent determined by the restriction factor (**Amalfitano, page 3, paragraph 41, lines 6-7**, *"As requests are popped off the queue, they are assigned to resources according to priority level"*)

29. Amalfitano doesn't teach: measuring means, calculating means, access control means

30. Otis teaches: means for measuring usage of resource (**Otis, column 4, lines 16-19**, *"the bandwidth manager 10 can be used to monitor "TCP/IP" traffic and provides real-time bandwidth usage data in various reports formatted in HTML."*)

31. means for calculating a restriction factor (**Otis, column 5, lines 32-35**, *"As each IP-address under management sends or receives a data packet, the respective CPU 11 or 12 computes the running bandwidth demands for that address. A bandwidth limit value is associated with each IP-addresses under management", bandwidth limit value is calculated using CPU*)

32. access control means (**Otis, column 5, lines 38-47**, *"if the on-the-fly computation of the running bandwidth demand shows that the IP-address under management is not operating within its allowed bandwidth, the data packet may be delayed for delivery at a less congested time or simply dropped altogether. The data packet delay mechanism can be implemented with a circular ring buffer maintained in*

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MEMs 13 and 14 that stores as much as two seconds worth of full-duplex data at the maximum rates”)

33. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Otis’ bandwidth manager to implement Amalfitano’s techniques since “Internet access bandwidth is both a critical resource and a key cost factor for ISP’s in particular. Reliable bandwidth usage auditing and monitoring is important in web hosting businesses” (***Otis, column 2, lines 9-12***). This method of implementing Amalfitano’s techniques was within the ordinary ability of one of ordinary skill in the art based on the teaching of Otis. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Amalfitano and Otis to obtain the invention.

34. **Claims 7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Amalfitano, US 2001/0033557** in view of **Chuah US 6,567,416**.

35. **As per claim 7,**

36. Amalfitano teaches: apparatus according to claim 5 (see claim 5 rejection)

37. Amalfitano doesn’t teach: associated with a modem associated with a server controlling access to the internet

38. Chuah teaches: associated with a modem (***Chuah, fig 1 element 4, modem***)

39. associated with a server controlling access to the internet (***Chuah, fig 1, element 14: servers***)

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40. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include Chuah's modem and server in Amalfitano's system since this configuration is "typically utilized today to provide remote internet access through modems to user computers" (**Chuah, column 1, lines 38-40**). This method of improving Amalfitano's system was within the ordinary ability of one of ordinary skill in the art based on the teaching of Chuah. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Amalfitano and Chuah to obtain the invention.

41. **As per claim 8,**

42. Amalfitano teaches: apparatus according to claim 5 (see claim 5 rejection)

43. Amalfitano doesn't teach: associated with a switching system for controlling access to an internet service provider

44. Chuah teaches: associated with a switching system for controlling access to an internet service provider (**Chuah, fig 1, element 6: PSTN, public switch telephone network, element 10: ISP, internet service provider**)

45. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include Chuah's switching system in Amalfitano's system since this configuration is "typically utilized today to provide remote internet access through modems to user computers" (**Chuah, column 1, lines 38-40**). This method of improving Amalfitano's system was within the ordinary ability of one of ordinary skill in the art based on the teaching of Chuah. Therefore, it would have been obvious to one of

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ordinary skill in the art to combine the teachings of Amalfitano and Chuah to obtain the invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHOA B. HUYNH whose telephone number is (571) 270-7185. The examiner can normally be reached on Monday - Thursday: 7:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pankaj Kumar can be reached on (571) 272-3011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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K.H.

/Pankaj Kumar/

Supervisory Patent Examiner, Art Unit 4145